



Figure 13. Head cut in dry swale at site D.

To compare effluent concentrations, a Kruskal-Wallis test was performed for the four sites. For TN, TP, and TSS, significant differences were found, with p-values of 0.0029, <0.0001, and <0.0001, respectively. For TN, there were no significant differences among effluent concentrations when comparing the dry swales to each other and the wetland swales to each other. All combinations of a wetland swale versus a dry swale were significantly different. Thus, the two dry swales produced effluent nitrogen concentrations that were statistically higher than those from wetland swales (Figure 14). This was probably due to the larger number of unit processes (denitrification, filtration, and potentially greater plant uptake) employed by a wetland swale as compared to those of a dry, grassed swale. Similar trends were not found for TP or TSS. For these pollutants, all other swales differed (significantly) from site D, likely due to erosion from the head cut. The effluent TP and TSS concentrations from the other three swales (sites A-C) were not significantly different.